

## **COUNTY OF LOS ANGELES**

#### DEPARTMENT OF CORONER

1104 N. MISSION RD., LOS ANGELES, CALIFORNIA 90033



Anthony T. Hernandez
Director

Lakshmanan Sathyavagiswaran, MD Chief Medical Examiner-Coroner

March 14, 2006

The Honorable Board of Supervisors County of Los Angeles 383 Kenneth Hahn Hall of Administration 500 West Temple Street Los Angeles, CA 90012

**Dear Supervisors:** 

# DEPARTMENT OF CORONER VOICE OVER INTERNET PROTOCOL PROJECT (All AFFECTED) (3 VOTES)

APPROVE (X)

CIO RECOMMENDATION:
APPROVE WITH MODIFICATION ( )

DISAPPROVE ()

# JOINT RECOMMENDATION WITH THE CHIEF ADMINISTRATIVE OFFICER THAT YOUR BOARD:

- Approve development of a Voice over Internet Protocol (VoIP) Project with a capacity to handle all voice and data communications for the Department of Coroner.
- 2. Authorize the Director of Internal Services Department to acquire a VoIP for the Department of Coroner at a cost not to exceed \$929,352 to be financed over a five-year term, not to exceed approximately \$197,000 per year.

#### PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

Approval of the recommendations will allow the Department to replace all current data and telephone systems with a new VoIP system to be installed in all three buildings located at 1104 North Mission Road, as well as the three satellite offices.

The Department's current system has exceeded its useful life and continues to deteriorate. Telephone calls from relatives of deceased, law enforcement, funeral directors, and outside agencies are dropped on a regular basis making an already difficult situation even more difficult. In June of 2004, a temporary fix was implemented to relieve cable congestion between two of the three main campus buildings, which included the installation

Honorable Board of Supervisors March, 14, 2006 Page 2

of new line cards in the PBX system, and 80 telephones changed out to newer models. At that time, the Department began the development of the necessary network infrastructure upgrades and the assessment of permanent telephone replacement systems.

The proposed project will replace the existing PBX with a new VoIP system to accommodate telephone, data network, voicemail, recorder logger, video conferencing, and related systems required under the converged services strategy recommended by the CIO and ISD. The new system will utilize the existing VoIP servers in the Downey Data Center. The VoIP Project is tentatively scheduled for completion in June of 2006.

The CAO Public Affairs Unit and Internal Services Department recommend the development and upgrade of the Los Angeles County Department of Coroner's data network infrastructure to support all communication requirements at the facilities and replace the old telephone system with a VoIP based solution.

#### <u>IMPLEMENTATION OF STRATEGIC PLAN GOALS</u>

The proposed project is consistent with the County's Strategic Plan Goal of Service Excellence and Fiscal Responsibility. The installation of the VoIP project will increase service to the community, improve employee productivity, facilitate the distribution of information/services provided by the Department, and invest in public infrastructure.

#### STRATEGIC ASSET MANAGEMENT PRINCIPLES COMPLIANCE

As conceived, the VoIP solution appears to be in compliance with asset management principles. The Internal Services Department will assist in the development of VoIP solution. However, a periodic review of the solution is necessary to ensure continued compliance with asset management principles.

#### FISCAL IMPACT/FINANCING

The VoIP project will be funded through the Telephone Utilities Budget administered by the Internal Services Department. The proposed project is estimated to cost \$929,352.16 and will be financed through a lease agreement for an estimated amount of \$197,000 annually over a five-year term. Payments for the proposed VoIP project are included in the Department's 2005/06 Adopted Budget.

#### **FACTS AND PROVISIONS/LEGAL REQUIREMENTS**

In April 2002, your Board approved the Telephone Equipment and Services Management Agreement (TESMA) Program to be directed by ISD. This program allows County Departments to purchase and install telephone and data systems from funds available in their current Adopted Budget or finance through lease agreements already established under the TESMA Program.

County Counsel has approved the TESMA Program lease agreement.

Honorable Board of Supervisors March, 14, 2006 Page 3

#### **ENVIRONMENTAL DOCUMENTATION**

Not Applicable.

#### **IMPACT ON CURRENT SERVICES (OR PROJECTS)**

The proposed VoIP Project has been designed to operate parallel with the Department's current telephone system and will not impact the current service provided to the public. A seamless transition is anticipated once the new system has been fully implemented and tested.

#### **CONCLUSION**

Please return one adopted copy of this letter to the CAO (Capital Projects Division) and one adopted copy to the Department.

Respectfully submitted,

ANTHONY T. HERNAMPEZ

Director

Chief Administrative Officer

Reviewed by:

JON W. FULLINWIDER

Chief Information Officer

DEJ:JH:vbp

c: Executive Office County Counsel Internal Services Department Lakshmanan Sathyavagiswaran, MD

# **CIO ANALYSIS**

## DEPARTMENT OF CORONER VOICE OVER INTERNET PROTOCOL PROJECT

CIO	REC	OMMENDATION: APPROVE APPROVE WITH MODIFICATION  DISAPPROVE
Con	New	Type: Contract Contract Amendment Contract Extension Source Contract Hardware Acquisition Other
New	/Rev	ised Contract Term: Base Term: <u>.5</u> Yrs # of Option Yrs <u>0</u>
Cont	Soft	Components:  ware
Proje	ect E	xecutive Sponsor: Anthony T. Hernandez, Director of Department of Coroner
	_	nformation :
		ntract Expenditures \$0
<u>-</u>		d Contract Amount \$929,352 Contract Amount \$929,352
Aggi	eyale	GOOMACT AMOUNT   \$929,332
		ackground:
Yes	No	Question
Yes	No	Question Is this project legislatively mandated?
Yes		
Yes	$\boxtimes$	Is this project legislatively mandated?
	⊠ ⊠ □	Is this project legislatively mandated?  Is this project subvented? If yes, what percentage is offset?  Is this project/application applicable to (shared use or interfaced) other departments? If yes, name the other department(s) involved? The VoIP system utilizes servers in the ISD Downey Data Center that also serve VoIP systems for other departments.
		Is this project legislatively mandated?  Is this project subvented? If yes, what percentage is offset?  Is this project/application applicable to (shared use or interfaced) other departments? If yes, name the other department(s) involved? The VoIP system utilizes servers in the ISD Downey Data Center that also serve VoIP systems for other departments.  Alignment:  Question
Strat	⊠ ⊠ □	Is this project legislatively mandated?  Is this project subvented? If yes, what percentage is offset?  Is this project/application applicable to (shared use or interfaced) other departments? If yes, name the other department(s) involved? The VoIP system utilizes servers in the ISD Downey Data Center that also serve VoIP systems for other departments.  Alignment:  Question  Is this project in alignment with the County of Los Angeles Strategic Plan?
Strat	⊠ ⊠ □	Is this project legislatively mandated?  Is this project subvented? If yes, what percentage is offset?  Is this project/application applicable to (shared use or interfaced) other departments? If yes, name the other department(s) involved? The VoIP system utilizes servers in the ISD Downey Data Center that also serve VoIP systems for other departments.  Alignment:  Question
Strat Yes	⊠ ⊠ □	Is this project legislatively mandated?  Is this project subvented? If yes, what percentage is offset?  Is this project/application applicable to (shared use or interfaced) other departments? If yes, name the other department(s) involved? The VoIP system utilizes servers in the ISD Downey Data Center that also serve VoIP systems for other departments.  Alignment:  Question  Is this project in alignment with the County of Los Angeles Strategic Plan?  Is this project consistent with the currently approved Department Business
Stratt Yes	⊠ ⊠ □	Is this project legislatively mandated?  Is this project subvented? If yes, what percentage is offset?  Is this project/application applicable to (shared use or interfaced) other departments? If yes, name the other department(s) involved? The VoIP system utilizes servers in the ISD Downey Data Center that also serve VoIP systems for other departments.  Alignment:  Question  Is this project in alignment with the County of Los Angeles Strategic Plan?  Is this project consistent with the currently approved Department Business Automation Plan?  Does the project's technology solution comply with County of Los Angeles IT

#### **Project/Contract Description:**

This project upgrades the data network (switches, wiring, and fiber optic cabling) in the Department of Coroner and implements a new telephone system utilizing the new voice over Internet Protocol (VoIP) technology.

#### **Background:**

Support for the current telephone system, which was installed over 10 years ago, serving the Department of the Coroner was discontinued by the manufacturer a few years ago. The system has continual repair problems and is at its maximum capacity. The system drops telephone calls in progress, thus resulting in poor service levels to the public and other agencies relying upon the Coroner's services. ISD has continued to support and maintain the system but has advised the Coroner that the system should be replaced as parts are becoming difficult to obtain. The Coroner's data network is also old and does not meet the recommended Local Area Network (LAN) standards in the County.

#### **Project Justification/Benefits:**

The project will upgrade the Department of Coroner's data network to the County's recommended standards and replace a deteriorating and troublesome PBX telephone system. Public access will improve and call recording will be more efficient.

#### **Project Metrics**

This project is implemented under the terms and conditions of the TESMA agreement. Initiation of lease payments are not made until after formal test and acceptance procedures and cutover to production operation. There is a one year warranty on all equipment.

# Impact On Service Delivery Or Department Operations, If Proposal Is Not Approved

If this project is not approved, the current telephone system will continue to provide service but with the continuation of calls dropping and inability of the Coroner to add additional phones. With the limited availability of parts for this obsolete PBX, at some point ISD may not be able to restore the system to operation if there is a major failure.

#### **Alternatives Considered:**

Alternatives considered included the continual support and maintenance of the existing PBX with resulting public service problems, replacement of the existing PBX with another PBX which would be contrary to the recommendation of the CIO and ISD, or replace the existing PBX with Centrex service from AT&T which would be more expensive than the VoIP proposal and not meet the Coroner's business requirements.

#### **Project Risks:**

Although VoIP technology is in use in other departments successfully, it is a new technology and the County has had limited experience in implementing and supporting it. VoIP is reliant

upon the LAN network and therefore the LAN must be designed and supported correctly to insure that the phone system is always in operation.

#### **Risk Mitigation Measures:**

The new telephone system will be implemented while continuing to operate the current PBX system. Once the new VoIP telephone system has been thoroughly tested, the service will be migrated from the old system to the new system. If there are any problems the service will be moved back to the old system. The old system will be left in place temporarily to provide back-up while verifying that the new system in operating correctly and reliably. The new VoIP system uses servers in the Downey Data Center. The servers in the Data Center are backed-up with operationally redundant servers in the Local Recovery Data Center in Orange County. Redundant Enterprise Network circuits and equipment connect the Coroner's local system to the data centers.

### **Financial Analysis:**

The new VoIP telephone system and data network upgrade equipment was competitively procured through the Telephone Equipment and Services Management Agreement (TESMA) which allows pre-qualified vendors to bid on various telecommunications projects as needed. The \$929,352.16 is the low bid quotation. TESMA has pre-arranged leasing terms available by the qualified vendors. The system will be procured through a 5 year lease/purchase. The payments are estimated at \$197,000 per year. The Department of Coroner has budgeted for the lease payments in its 2005-06 Adopted Budget.

#### **CIO Concerns:**

None

#### **CIO Recommendations:**

The CIO recommends approval of the project.

#### CIO APPROVAL

Date Received: February 2, 2006

Prepared by: Dennis Shelley

Date: February 6, 2006

Approved:

Date:

P:Drafts:CIO Analysis - Corner VolP Project.doc